

Serial No. 09/146,226

**REMARKS**

This application has been carefully reviewed in light of the Office Action dated December 29, 1999. By way of this amendment, claims 1, 2 and 14 have been amended. Claims 1-15 are currently pending in the application. Applicant hereby requests further examination and reconsideration in view of the following remarks.

The Examiner has objected to the drawings under 37 CFR 1.84(p)(5) on the basis that reference numeral 48a is mentioned in the specification but not shown in the drawings. In response, applicant has amended Figure 1 by changing reference numeral 48c to 48a. (Reference Numeral 48a is also shown in Figures 4 and 6.) Thus, it is respectfully submitted that this objection to the drawings has been overcome.

The Examiner has rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by Luthi. This ground of rejection is respectfully traversed in light of the present amendment.

Independent claim 1 recites a multi-zone drying cylinder for the through-air processing of permeable and semi-permeable webs. The cylinder comprises a plurality of conduits having channels extending radially and longitudinally within the cylinder and means for drawing air through the conduits. An air dam is provided to divide each conduit into two longitudinal chambers. Inlet port means distribute air flow into the longitudinal chambers; outlet port means distribute air flow out of the longitudinal chambers.

Luthi discloses a dryer comprising a rotatable drum 10 which supports a paper sheet 16. A plurality of hot gas pipes 30 extends radially inside the drum 10. Each hot gas pipe 30 has a longitudinally extending section 32 at its radially outer end. Gas is discharged from the sections 32 through slots or nozzles 34. The gas passes through a sheet support 36 and impinges on the paper sheet 16.

Although the gas pipes of Luthi are arguably "conduits" having inlets and outlets, Luthi fails to disclose an air dam that divides each conduit into two longitudinal chambers, as is now required by claim 1. Accordingly, Luthi fails to anticipate claim 1 as amended.

Furthermore, contrary to the Examiner's assertion, Luthi does not disclose a drying cylinder for through-air processing of paper sheets. As described in column 4,

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lines 26-32 of the Luthi patent, gas exiting the nozzles of the gas pipes 30 flows through the paper support 36 and then "circumferentially along the inside of the paper sheet 16." The used gas exits the drum 10 by way of trough 50 and gas outlet 52. Furthermore, lines 33-38 in column 4 state that the inside and outside pressures are controlled so that "very little, if any, gas will go through the paper sheet 16." Substantially all of the drying is done by impingement on the inside of the paper sheet. For these reasons, it is clear that Luthi does not disclose through-air processing of the sheet.

Applicant notes with appreciation the indication that claims 2-15 would be allowable if rewritten to include all the limitations of the base claim and any intervening claims. However, in view of the above remarks submitting that claim 1 as amended is allowable, it is felt that the rewriting of claims 2-15 is not necessary.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1-15 at an early date is solicited.

Respectfully submitted,

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Date

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